

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the previous amendments and the following remarks.

Before turning to the claims, a brief discussion of a substrate storage container according to disclosed embodiments is provided. A substrate storage container includes a container body 1, a door 2 for opening and closing the front of the container body 1, an attachment hole 11 formed in at least one of the container body and 1 the door 2, and an inner-pressure adjustment device 40 attached to the attachment hole 11 for adjusting the pressure inside the container body 1 closed with the door 2.

The inner-pressure adjustment device 40 includes an attachment cylinder 41 removably fitted to the attachment hole 11 and formed in cylindrical shape having a first opening at one end face and a second opening smaller than the first opening at an other end face, as illustrated in Fig. 4. As discussed in lines 18-21 of page 16 of the specification, the attachment cylinder 41 has a pair of juxtaposed flanges 42 integrally formed on the outer periphery thereof and fitted and engaged to the periphery of the attachment hole 11.

A hollow filter support structure 43 is fitted into the attachment cylinder 41, and a filter 46 is held inside the filter support structure 43. As discussed in lines 22-24 of page 16 of the specification, the filter support structure 43 is composed of a pair of support pieces 44 and 44A arranged opposite to and attached to each other, each of the pair of support pieces 44 and 44A having an approximately T-shaped or funnel-shaped section.

Shelf elements 2 for supporting substrates are formed on both interior sides of the container body 1. As illustrated in Fig. 11, at least part of the substrate contact area 22 of each shelf element 2 is formed with a low-frictional resistance portion 23 that is lower in frictional resistance than the non substrate contact area of the shelf element. As discussed in the paragraph bridging pages 22 and 23 of the specification, the arithmetic average roughness of the low-frictional resistance portion 23 is specified to be 0.2a or above in terms of the average roughness (Ra). Also, as discussed in the first full paragraph on page 24 of the specification, grooves 80 for supporting substrates are formed at the interior backside of the container body 1 and include a lean constraint element 81 for preventing a standing substrate from leaning.

Turning now to the Official Action, Claim 8 is rejected as being unpatentable over U.S. Patent No. 6,732,877, hereinafter Wu.

Amended Claim 8 recites a substrate storage container including a container body, a door for opening and closing the front of the container body, an attachment hole formed in at least one of the container body and the door, and an inner-pressure adjustment device attached to the attachment hole for adjusting the pressure inside the container body closed with the door. The inner-pressure adjustment device includes an elastic attachment cylinder removably fitted to the attachment hole and formed in cylindrical shape having a first opening at one end face and a second opening smaller than the first opening at an other end face. A hollow filter support structure is fitted into the attachment cylinder, and a filter is held inside the filter support structure. The attachment cylinder has a pair of juxtaposed flanges integrally formed on the outer periphery thereof and fitted and engaged to

the periphery of the attachment hole. The filter support structure is composed of a pair of support pieces arranged opposite to and attached to each other, each of said pair of support pieces having an approximately T-shaped or funnel-shaped section.

Wu discloses an air vent plug arrangement for a substrate storage container. The air vent plug arrangement is mounted at an air vent 80 of a bottom panel 81, and includes a mounting ring 1 having a top side edge 10 fastened to the air vent 80 and a plug body 2 having a plug cap 4 thereon and a filter 5 therein. As discussed in lines 11-16 of column 3 of Wu, the mounting ring 1 is fixedly fastened to the air vent 80 by, for example, ultrasonic welding, or is alternatively integral with the bottom panel 81 around the air vent 81.

The Official Action appears to take the position that Wu's mounting ring 1 and plug cap 4 together constitute an attachment cylinder, and that Wu's plug body 2 constitutes a filter support structure. However, the mounting body 1 (and therefore the "attachment cylinder") is not removably fitted to the air vent 80. Instead, as discussed above, the mounting ring 1 is fixedly fastened to the air vent 80 by, for example, ultrasonic welding, or is alternatively integral with the bottom panel 81 around the air vent 81.

Thus, Wu does not disclose a substrate storage container including a container body, a door for opening and closing the front of the container body, an attachment hole formed in at least one of the container body and the door, and an inner-pressure adjustment device including an elastic attachment cylinder removably fitted to the attachment hole, in combination with the other features recited in amended Claim 8.

Moreover, Wu's mounting ring 1 and plug cap 4 do not include a pair of juxtaposed flanges integrally formed on the outer periphery thereof and fitted and engaged to the periphery of the air vent 80. Thus, Wu does not disclose a substrate storage container including an attachment cylinder having a pair of juxtaposed flanges integrally formed on the outer periphery thereof and fitted and engaged to the periphery of an attachment hole, in combination with the other features recited in amended Claim 8.

Furthermore, Wu's plug body 2 is not composed of a pair of support pieces arranged opposite to and attached to each other, each of said pair of support pieces having an approximately T-shaped or funnel-shaped section. Thus, Wu does not disclose a substrate storage container including a filter support structure is composed of a pair of support pieces arranged opposite to and attached to each other, each of said pair of support pieces having an approximately T-shaped or funnel-shaped section, in combination with the other features recited in amended Claim 8.

Claim 8 is therefore allowable over Wu, and withdrawal of the rejection of Claim 8 is respectfully requested.

Claim 14, the only other pending independent claim, is rejected as being unpatentable over Wu in view of U.S. Patent No. 5,960,960, hereinafter Yamamoto.

Amended Claim 14 recites a substrate storage container including a container body, a door for opening and closing the front of the container body, and an inner-pressure adjustment device attached to at least one of the container body and the door for adjusting the pressure inside the container body closed with the door. Shelf elements for supporting substrates are formed on both interior sides of the container

body. At least part of the substrate contact area of each shelf element is formed with a low-frictional resistance portion that is lower in frictional resistance than the non substrate contact area of the shelf element. Each low-frictional resistance portion is formed by a texture transferred from a surface of a mold to a surface of the shelf element. The arithmetic average roughness of the low-frictional resistance portion is specified to be 0.2a or above in terms of the average roughness (Ra).

With respect the recited arithmetic average roughness of the low-frictional resistance portion being specified to be 0.2a or above in terms of the average roughness (Ra), the Official Action states in the last paragraph on page 4 that "(i)t would have been obvious to one having ordinarily skill in the art at the time the invention was made to have made the low-frictional resistance portions from a material having any roughness in order to have the desired smoothness."

Applicants respectfully disagree. There is no hint in Yamamoto of any "desired smoothness" for the elastic pieces 203. Instead, Yamamoto simply states in lines 3-6 of column 3 that the elastic pieces 203 are preferably made of material with low coefficient of friction and high mechanical strength.

Accordingly, evidence establishing obviousness of the substrate storage container recited in amended Claim 14 is lacking, and Claim 14 is allowable over Wu in view of Yamamoto. Withdrawal of the rejection of Claim 14 is therefore respectfully requested.

The dependent claims are allowable at least by virtue of their dependence from allowable independent claims. The dependent claims also recite further distinguishing aspects of the substrate storage container at issue here. For example, Claim 15 recites grooves for supporting substrates formed at the interior

backside of the container body including a lean constraint element for preventing a standing substrate from leaning.

Early and favorable action with respect to this application is respectfully requested.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

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